SAFETY DATA SHEET (SDS)

GHS and OSHA 29 CFR §1910.1200 (eCFR) complian UN1006



Revision: 2 (May 17, 2015) ISSUE DATE: December 30, 2014

ARGON, COMPRESSED Ar

ARGON, ARGON OIL FREE Argon Gas, Argon Compressed UN 1006

STOODY INDUSTRIAL AND WELDING SUPPLY, INC. 3316 National Ave., San Diego, Ca. 92113
Phone: 619-234-6750

WWW.STOODYIND.COM

PHONE NUMBERS
Product Information: 619-234-6750

24-hour Emergency Response Professional Emergency Resource Services 800-633-8253

MILITARY EMERGENCY RESPONSE 800-851-8061

6830-00-169-0779	6830-00-764-7029	6830-00-985-7281	6830-01-459-3511
6830-00-281-8808	6830-00-782-2637	6830-01-431-0400	
6830-00-290-4291	6830-00-935-1008	6830-01-431-0533	
6830-00-564-8989	6830-00-973-7274	6830-01-431-0576	

SUPPLIER INFORMATION:

Safety and handling equipment, gas cylinders and refills, personal protection equipment, fire extinguishers, cylinder services, respirators, etc. are available at Stoody Industrial and Welding Supply, Ind. Our main location is at 3316 National Avenue, (near the 32nd Street Naval Base) in San Diego California 92113. Call 1-619-234-6750 or visit our web site, stoodyind.com stoodyind.com for more information.

DISCLAIMER: The information contained herein is accurate to the best of our knowledge. Stoody Industry and Welding Supply Inc., does not assume any responsibility or liability for user's reliance or consequences of reliance on the information provided in this SDS. **Stoody industrial and Welding Supply, Inc. makes no warranty or guarantee of any kind, expressed or implied, concerning the safe use of this material in your process or in combination with other substances.**

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SAFETY DATA SHEET (SDS)

GHS and OSHA 29 CFR §1910.1200 (eCFR) compliant



ARGON, Compressed

1 IDENTIFICATION

1(a) Product identifier used on label

Argon, compressed

1(b) Other means of identification: Ar, argon, argon oil free, argon gas

1(c) Recommended use of the chemical and restrictions on use

Recommended use: Welding, various inert gas applications

Restriction on use: NONE

1(d) Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Chemical Manufacturer: STOODY INDUSTRIAL AND WELDING SUPPLY, INC

3316 National Avenue San Diego, CA 92113 1-619-234-6750

1(e) Emergency phone number

Professional Emergency Resource Services: 800-633-8253

Military Emergency Resource: 800-851-8061

2 HAZARD(S) IDENTIFICATION

2(a) Classification of chemical in accordance with paragraph (d) of §1910.1200

Nonflammable

2(b) Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200

Signal Word	Hazard Statement(s)	Symbol(s)	Precautionary Statements
Warning	May displace oxygen and cause rapid suffocation. (H280) Contains Gases under Pressure; may explode if heated.	Compressed Gas	(P410 + P403) Protect from sunlight. Store in a well-ventilated place.

2(c) Describe any hazard not otherwise classified that have been identified during the classification process

Argon is heavier than air and may accumulate in lowered spaces causing a deficiency of oxygen. Ruptured cylinder may rocket.

2(d) Where an ingredient with unknown acute toxicity is used in a mixture at a concentration = 1% and the mixture is not classified based on testing of the mixture as a whole, a statement that X% of the mixture consist of ingredient(s) of unknown acute toxicity is required.

Argon consists of 0% of unknown acute toxicity.

3 COMPOSITION / INFORMATION ON INGREDIENTS

3(a) Chemical name; Ar

3(b) Common name; Argon, compressed

3(c) CAS number and other unique identifiers;

<u>CAS Number</u> <u>Other unique identifiers</u>

7440-37-1 No applicable information is available.

3(d) Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance. No applicable information is available.

4 FIRST-AID MEASURES

4(a) Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

ROUTES OF EXPOSURE (UNDER NORMAL CONDITIONS) (yes or no)

INHALATION: Yes	SKIN: Yes	EYE CONTACT: Yes	INGESTION: No
Effects: Simple asphyxiant	Effects: None known	Effects: None known	Effects: None known

RAPIDLY EXPANDING STATE ROUTES OF EXPOSURE (yes or no)

INHALATION: Yes	SKIN: Yes	EYE CONTACT: Yes	INGESTION: No
Effects: Simple asphyxiant	Effects: frostbite	Effects: frostbite	Effects: None expected

FIRST-AID: (No action shall be taken involving any personal risk or without suitable training.)

Inhalation (asphyxiation); persons suffering from lack of oxygen should be removed to fresh air. If victim is not breathing, administer artificial respiration. If breathing is difficult, administer oxygen. Obtain prompt medical attention.

Skin frostbite; flush with lukewarm water, and obtain immediate medical attention. DO NOT RUB EFFECTED AREA.

Eye frostbite; flush eyes with cool water for 15 minutes and obtain immediate medical attention.

Ingestion; if symptoms occur, get immediate medical attention.

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5 FIRE-FIGHTING MEASURES

5(a) Suitable (and unsuitable) extinguishing media

Use extinguishing media appropriate, e.g., dry chemical or CO₂, for surrounding fire.

Move containers from fire area if you can do it without risk.

Damaged cylinders should be handled only by specialists.

5(b) Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products).

Pressure in a cylinder can build due to nearby fire heat and may rupture if pressure relief devices should fail to function. Self – contained breathing apparatus (SCBA) may be required for rescue workers.

6 ACCIDENTAL RELEASE MEASURES

6(a) Personal precautions, protective equipment, emergency procedures.

Evacuate all personnel from the affected area. Monitor oxygen level (\geq 19.5%). Use appropriate air-fed respirator or self-contained breathing apparatus if oxygen level is unknown or <19.5%. Ventilate area or remove cylinders to an outdoor location. Shut off leak source when it can be done safely. If leaking from cylinder or cylinder valve, contact your supplier.

6(b) Method and materials for containment and cleaning up.

Use water spray to reduce or divert vapor cloud drift. Isolate area until gas has dissipated and been determined safe.

7 HANDLING AND STORAGE

7(a) Precautions for safe handling.

See Para. 2(b)

7(b) Conditions for safe storage, including any incompatibilities.

	Conditions for safe storage	Incompatibilities
1.	Store and use with adequate ventilation.	
2.	Cylinders should be stored upright with valve protection cap in place and firmly secured to prevent falling or being knocked over.	
3.	Protect cylinders from physical damage; do not drag, roll, slide or drop.	No applicable information is available.
4.	Full and empty cylinders should be segregated.	
5.	Do not allow storage area temperature to exceed 125°F (52°C). Full and empty cylinders should be segregated.	
6.	Use a first-in, first-out inventory system to prevent full containers from being stored for long periods of time.	
7.	Compressed gas cylinders to be refilled by qualified producers of compressed gases only.	
8.	Use a suitable hand truck for cylinder movement.	
9.	Never attempt to lift a cylinder by its valve protection cap.	
10.	Keep cylinders and their valves free from oil and grease.	
11.	Open valve slowly.	
12.	If user experiences difficulty operating cylinder valve, discontinue use and contact supplier.	
13.	Never insert an object (e.g., wrench, screwdriver, pry bar, etc.) into valve cap openings. Doing so may damage valve, causing a leak to occur.	
14.	Never strike an arc on a compressed gas cylinder or make a cylinder a part of an electrical circuit.	
15.	Use an adjustable strap wrench to remove over-tight or rusted caps.	

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8(a) OSHA permissible exposure limit (PEL). American Conference of Governments Industrial Hygienists (ACGIH) Threshold Limits Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available. — PEL: Simple Asphyxiant — TLV: Simple Asphyxiant

Maritime: 29 CFR 1915.1000 Table Z-Shipyards -- Simple asphyxiants. The limiting factor is the available oxygen which shall be at least 18 percent and be within the requirements addressing explosion in subpart B of part 1915.

8(b) Appropriate engineering controls.

Natural or mechanical air circulation is needed to maintain oxygen levels.

$8 (c) \quad \text{Individual protection measures, such as personal protective equipment.} \\$

Safety glasses/goggles, work gloves (gloves must be clean and free of oil or grease), and safety shoes are recommended when handling cylinders.

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9 PHYSICAL and CHEMICAL PROPERTIES

a) Appearance (physical state, color, etc.)	Colorless Gas
b) Odor	Odorless
c) Odor threshold	Not applicable
d) pH	Not applicable
e) Melting point/freezing point	-308.6°F (-189.2° C)
f) Initial boiling point	-302.6°F (-185.9°C)
g) Flash point	Not applicable
h) Evaporation rate	Not applicable
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Not applicable
k) Vapor pressure	500 mmHg @ -310° F (-190° C)
l) Vapor density	1.784 g/L @ 32.0° F (0°C)
m) Relative density	1.38 (air = 1)
n) Solubility(ies)	Water, 0.056 Vol./Vol. at 60° F (15.6°C), slightly soluble
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Will not occur
q) Decomposition temperature	None
r) Viscosity	0.0225 cP @ 80.3° F (26.85°C)

10 STABILITY and REACTIVITY

10(a) Reactivity

Not considered to be reactive

10(b) Chemical stability

Stable

10(c) Possibility of hazardous reactions

None found

10(d) Conditions to avoid (e.g., static discharge, shock, or vibration)

None found

10(e) Incompatible materials

None found

10(f) Hazardous decomposition products

Will not occur

11 TOXICOLOGICAL INFORMATION

Description of the various toxicological (health) effects and available data used to identify those effects, including:

11(a) Information on likely routes of exposure (inhalation, ingestion, skin and eye contact);

Argon can be absorbed into the body by Inhalation. Target organ: Central Nervous System.

11(b) Symptoms related to the physical, chemical and toxicological characteristics;

Dizziness, unconsciousness, asphyxia; skin, eye frostbite (on contact with liquid).

11(c) Delayed and immediate effects and also chronic effects from short- and long-term exposure;

Short-term effects: Suffocation. Liquid may cause frostbite.

11(d) Numerical measures of toxicity (such as acute toxicity estimates);

No identifiable acute toxicity.

11(e) Whether the hazardous chemical is listed in the International Toxicology Program (NTP) Report on Carcinogenic (latest edition) or has been found to be a potential carcinogenic in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

Argon is not listed as a carcinogenic or potential carcinogenic by NTP, OSHA or IARC.



12 ECOLOGICAL INFORMATION

12(a) Ecotoxicity (aquatic and terrestrial, where available)

This product does not contain ecotoxicological properties, aquatic or terrestrial

12(b) Persistence and degradability

No adverse information found

12(c) Bioaccumulative potential

This product does not have a bioaccumulative potential

12(d) Mobility in soil

No adverse information found

12(e) Other adverse effects (such as hazardous to the ozone layer)

No adverse ecological effects are expected. Argon does not contain any Class I or Class II ozone depleting chemicals (40 CFR Part 82). Argon is not listed as a marine pollutant by DOT (49 CFR Part 171.

13 DISPOSAL CONSIDERATIONS

13(a) Description of waste residue and information on their safe handling and method of disposal, including the disposal of any contaminated packaging.

Do not attempt to dispose of cylinder or its contents. Cylinder(s) and unused contents should be returned to supplier for disposal in accordance with appropriate Federal, State, local regulation.

14 TRANSPORTATION INFORMATION

14(a) UN number: UN 1006

14(b) UN proper shipping name: Argon, compressed

14(c) Transportation hazard class(es): 2.2 (Nonflammable Gas)

14(d) Packing group, if applicable: Product is not listed

14(e) Environmental hazards (e.g.,) Marine pollutant (yes/No): No

14(f) Transport in bulk (according to Annex II of MARPOL 73/78 and IBC Code):

Product does not fall under purview of cited regulations.

14(g) Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside of their premises:

Cylinders should be properly separated from non-compatible gas cylinders and transported in a upright, secure position, in a well ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards and should be discouraged.

15 REGULATORY INFORMATION

15(a) Safety, health and environmental regulations specific for the product in question.

User(s) of this product is responsible for regulatory compliance on a federal, state, and local level.

U.S. FEDERAL REGULATIONS:

EPA - ENVIRONMENTAL PROTECTION AGENCY

40 CFR PART 68, Risk Management for Chemical Accidental Release, does not list air as a regulated substance.

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (40 CFR Parts 117 and 302):

Reportable Quantity (RQ): None

SARA: Superfund Amendment and Reauthorization Act

SECTION 302/304: Requires emergency planning on threshold planning quantities (TPQ) and release reporting based on reportable

quantities (RQ) of EPA's extremely hazardous substances (40 CFR Part 355).

Extremely Hazardous Substances: None Threshold Planning Quantity (TPQ): None

SECTIONS 311/312: Require submission of material safety data sheets (MSDSs) and chemical inventory reporting with identification of EPA defined hazard classes (40 CFR Part 370). The hazard classes for this product are:

ACUTE HEALTH (Immediate): Yes CHRONIC HEALTH (Delayed): No

PRESSURE: Yes REACTIVITY: No

FIRE: No

15(a) continued on page 5



15 REGULATORY INFORMATION (continued from page 4)

TSCA: Toxic Substance Control Act: Argon is listed on the TSCA inventory.

OSHA - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION:

29 CFR 1910.119, Appendix A, does not list argon as a highly hazardous chemical.

No adverse ecological effects are expected. Argon does not contain any Class I or Class II ozone depleting chemicals (40 CFR Part 82). Argon is not listed as a marine pollutant by DOT (49 CFR Part 171).

Shipment of compressed gas cylinders which have not been filled with the owner's consent is a violation of Federal law (49 CFR Part 173.301 (b)).

CALIFORNIA PROPOSITION 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): Argon is not listed.

CANADIAN REGULATIONS: WHIMS Classification: Non-controlled, A (compressed gases)

16 OTHER INFORMATION, including date of preparation or last revision

16(a) OTHER INFORMATION:

DO NOT DISCARGE TOWARD ANYONE

SPECIAL PRECAUTIONS: Use piping and equipment adequately designed to withstand pressures to be encountered. Use a check valve or other protective apparatus in any line or piping from the cylinder to prevent reverse flow.

NFPA RATINGS:

HEALTH-Blue: = 3 **FLAMMABILITY-Red:** = 0 **INSTABILITY-Yellow:** = 0 **SPECIAL HAZARDS*-White:** = **SA** *LEGEND:* 0-4 - 0-least hazardous; 4-most hazardous

*OX (Oxidizers), W (Water reactives), SA (Simple Asphyxiants), (blank if no special hazard)

STANDARD VALVE CONNECTIONS FOR U.S. AND CANADA:

THREADED: 0-3000 psig CGA 580 3001-5500 psig CGA 680 5501 - 7500 psig CGA 677

PIN-INDEXED YOKE: Not available

ULTRA HIGH INTEGRITY: 0-3000 psig CGA 718 Use the proper CGA connections, <u>DO NOT USE ADAPTERS</u>

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Information Sources: Data is compiled from a variety of sources, including publicly available documents, internal data and other sources.

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